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REMARKS ON THE DIVISION OF TENDONS.

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THE division of tendons for the relief of lameness and deformity is now attracting no small degree of attention. While it is regarded by many as one of the greatest improvements of modern surgery, there are others, perhaps, who contend, that all which is accomplished by it can be attained as easily, with less suffering and danger, and in as short a period of time, by suitable apparatus. I am not, however, I confess, prepared to subscribe to the latter opinion; though I would not deny that more can be effected by machinery in many cases of deformity than is generally supposed.

It is well known to those who have given the subject much attention, that there was hardly any improvement in the mechanical means employed in the treatment of club-foot for more than two thousand years, from the time of Hippocrates to our own. Nor am I aware that anything valuable in this way has recently been invented. We certainly know that deformities of a most painful and annoying character are now removed by a slight operation, and without a long and tedious confinement; and we know, also, that until the practice of this operation, numberless individuals, and some of them of the highest rank and most ample means, have carried similar deformities to their graves. Many such persons have expended large sums of money, and cheerfully endured the sufferings almost necessarily attendant on the long-continued application of complicated apparatus, in the hope of relief, but few of them have derived much benefit from these means, and most of them have remained cripples through life. No one will believe that Sir Walter Scott or Lord Byron would have submitted to their infirmity as they did, if there had been in their time any known method of cure; and it can now hardly be doubted, that they might have been cured by a slight operation, followed by a few weeks of confinement. They certainly had access to the best science and skill of Europe, and they surely would not have been slow to have availed themselves of them, if they could have done anything in their case.

It will be difficult, I am sure, to persuade those who have divided tendons for various kinds of deformity, to abandon the operation, unless some method equally prompt and efficacious can be found as a substi-

tute. If there be any such at the present moment, I am ignorant of it; and I am also ignorant of any important objections that can be made to the operation of tenotomy. It is admitted that a re-united tendon becomes nearly, if not quite, as strong, pliable, and in all respects as useful, as one that has not been divided. The operation as now performed is easily done, and causes but little pain. It is safe; it has in no instance, that I am aware of, been productive of bad consequences; the hemorrhage is slight, and in no case, of which I have heard, has there been any tetanic symptoms after it. It is applicable to some kinds of deformity, as that of strabismus, to which no apparatus can be applied, and in most others I believe that it will make the mechanical means far more efficacious if it be done before their application. The benefit resulting from it, has not, perhaps, been equal in all cases to what was anticipated, but it has, I am confident, very often done more good than any but the most sanguine would have expected.

Some persons seem to be surprised that the operation for club-foot was not done at an earlier period; but I confess that I am rather astonished that it was attempted as soon as it was, when I consider the objections that were supposed to exist to it. In the first place, it was thought, till recently, that most cases of this deformity were the result of a malformation of the bony structure of the foot, and that the contraction of the tendons was the consequence of this malformation. Now if this had been the efficient cause of the difficulty, it must be apparent that the mere division of one or more tendons would not be very likely to remove it. It is singular, to be sure, that this opinion should have prevailed among intelligent surgeons, and it probably owed its origin to the fact that when dissections were made of club-feet, they were either the club-feet of adults, or those of individuals who had for some time walked on them, and not the club-feet of new-born infants. If the latter had been examined, it would have been found that there was in most cases but a slight change in the bony structure of the part, with a trifling displacement of the bones, and that the form of the bones differed but little from that of those of the normal foot.

There is another circumstance, too, that one would have thought sufficient to prevent the adoption of this erroneous opinion, and that is that club-foot is by no means always congenital; that it frequently follows disease that is attended with contraction of the tendons, and that it increases in degree from the mildest to the severest form.

Notwithstanding all this, it is certain that the opinion to which I have alluded was universally adopted, and was not called in question till the time of Scarpa. He attributed the difficulty to the right cause, muscular action, and denied that there was any considerable deformity of the individual bones, except what arose from the preternatural mode in which the patient had been compelled to walk. He demonstrated in the clearest manner, as has been stated by Duval, that in most cases of club-foot the bones are not luxated, but merely drawn from their natural relations to each other. This he did in a memoir which he published in 1803. But few, if any, adopted his views, and the opinions of surgeons remained, till very recently, unchanged upon this point. The

present operation, therefore, would of course have been regarded by them as unphilosophical and not calculated to effect the object for which it was intended.

But admitting that a correct notion had been entertained of the nature of the deformity, there is another objection to the operation that probably exerted a considerable influence. I allude to the difficulty with which tendons were supposed to unite after having been divided. It was formerly thought that this could not be accomplished unless the divided ends were kept in close contact, and various contrivances were made to effect this in those cases in which there had been an accidental division of the tendo-Achillis. So that if a correct view had been taken of the nature of the trouble, surgeons would have been slow to adopt the proper means of relief. It is now ascertained, however, that tendons, like other parts, readily unite, provided the separation of the divided parts is not much greater than ordinarily takes place. This is usually accomplished in the tendo-Achillis in from three to six weeks, the difference of time depending somewhat on the age and constitution of the patient. It has been satisfactorily proved by experiments on inferior animals, that union will take place if the separation of the divided ends of the tendon does not much exceed two inches.

There is another reason, probably, that had its effect in preventing the operation of tenotomy, and that is the fear of producing tetanus by it. This formidable malady so often following wounds of tendons, would naturally make surgeons cautious how they divided them, and though they must have seen numerous cases in which this took place from accident without any bad effect ensuing, they would not be eager to do it voluntarily. They did not seem to be aware, that while a wound of a tendon is always an alarming injury, its complete division is rarely followed by bad consequences.

It will then, perhaps, be admitted, that it is not surprising that the operation of tenotomy was not attempted at an earlier period, and that consequently the highest degree of credit should be awarded to the distinguished surgeon who has in our time satisfactorily shown by his own practice that it is both safe and useful. The few cases in which the operation was done before the time of Stromeyer, either from the manner it which it was done, or the severe suffering consequent on it, or the length of time requisite for a cure, or from some other cause not hitherto explained, had no effect in introducing it into general use.

The first case of which there is any record, of a division of the tendo-Achillis for the cure of club-foot, occurred in the latter part of the last century at Frankfort, and the operation was performed by a surgeon of the name of Lorenz. He divided the integuments over the tendon as well as the tendon itself, and the case is reported to have been ultimately successful. That the cure was not speedy is probable from the fact that the operation was not again attempted till the year 1811, about thirty years after, when Michaelis recommended a modification of it, consisting in a partial division of the tendon, and this he is said to have practised with much success. About the same time Sartorius, of Nassau, published an account of an operation of this kind, but of a very severe character,

in which he exposed the tendon freely before he divided it, and then violently bent the foot on the leg and ruptured whatever tended to prevent the flexion. The recovery was not only tedious, but the joint became anchylosed. I am ignorant of the details of the operation in all these cases. I have never seen the original accounts; but Delpech states that they are very imperfectly given, and that the precise mode of operating is not described in any of them. He was satisfied that in all of them the skin was very freely divided over the tendon, and to this he attributes in a great measure the want of success; the access of air to the divided ends of the tendon, he supposed, excited an undue degree of inflammation. When he operated, therefore, which he did in the year 1816, on a boy of nine years of age, he determined, if possible, to guard against this. This case he has given at length in the first volume of his clinical surgery, and describes minutely the mode in which the operation was performed. He did not divide the integuments directly over the tendon, but introduced a bistoury between them and the tendon and carried it completely through, so as to divide the skin on both sides to the extent of an inch, together with the cellular texture over the tendon, and he then with another knife, with a more curved edge, divided the tendon itself. But whether from the too great exposure of the tendon or some other cause, the ends of it ulcerated, portions sloughed off, and abscesses formed in various parts of the limb. He never repeated the operation. It is said, however, that the patient ultimately recovered, but it is apparent from the account that his cure was tedious, and that his sufferings were great. In fact, Delpech says, in concluding his notice of the case, which he published seven years after the operation, "The patient now enjoys perfect health; and with the aid of a suitable apparatus, which it is my intention he should wear for many years to come, he excites, by his rapid and confident mode of walking, the astonishment and admiration of all who knew him before the operation." If the result in this case was to be considered favorable, it is not surprising that the operation was not repeated, for as much, probably, might have been gained in the same length of time by proper apparatus and manipulations, without suffering or hazard to the patient. The deformity was that of pes equinus, and I am confident that I have seen a patient on whom I have performed Stromeyer's operation for this difficulty, in a far better condition, without having suffered at all, at the end of seven weeks, than Delpech's patient was at the end of seven years.

Such a result was not likely to bring the operation into use, and in fact it does not appear that it was again attempted till it was performed by Stromeyer, of Hanover, in 1831. His method, however, was somewhat different, and has been crowned with the most signal success. He makes the external wound as small as possible, and does not, if it can be avoided, carry the incision through the opposite side of the integuments. The great secret of the success seems to be in making the operation in a great measure what it has been called, a sub-cutaneous one; the failure in the former cases having arisen, apparently, from the free incision of the integuments and the consequent exposure of the tendon.

The tendo-Achillis, as is well known, is by no means the only one that is the subject of operation. Those of the ham, the fingers, the fore-arm, the neck and the eye, have been divided with the happiest effects. In fact, it has now become common to divide other parts, when necessary, for the removal of lameness and deformity, and for this purpose the fascia, muscles and ligaments of many parts have been subjected to a like operation, not only without producing any unpleasant consequences, but frequently with the best results.

It is feared by many that this operation may be carried too far, or, in other words, that it may be resorted to in cases in which it can do no good, but may do mischief. But an argument drawn from its abuse should have but little weight; a similar one might be urged against a variety of others that are daily performed by surgeons. Tenotomy is always safe and often useful in the hands of a skilful man, and it should be attempted by none other.

My own experience with the operation has not been sufficiently extensive to make it of much value. But such as it is, it is altogether in its favor. During the year past I have operated in thirteen cases; eight of these were of that kind of deformity known by the name of varus, four that of pes equinus, and one with a contraction of the knee-joint consequent on synovial inflammation. Ten were entirely relieved in a short time; the period varying from six weeks to five months; the difference arising from the different ages of the patients and the degree of deformity; and of this number all of them, I have no doubt, are nearly if not quite well at this moment. The remaining cases were operated on only a few days since, but from the age of the patients, they being quite young, and the slight degree of deformity, there can be no question that the feet will be brought to their proper position in a few weeks.

One of my patients was a young man in his 20th year, who came to the Mass. General Hospital in consequence of a congenital varus of a very aggravated kind. "The left foot was completely inverted, so that the toes pointed to the hollow of the right foot. The sole was fairly turned upward at the toes, and gradually assumed a lateral position towards the heel. The patient walked upon a cushion of thickened integuments, formed over what should have been the superior surface of the outer tarsal and metatarsal bones." The tendo-Achillis and the tendon of the tibialis anticus were divided on the 22d of Feb., 1840, but no extension was made till March 3d, on account of an old ulcer on the outer ankle; the extension was removed the next day, and not renewed till the 13th, and was continued till May 8th. The position of the foot at that time was greatly improved, and the only obstacle to a cure seemed to be the rigid state of the tendo-Achillis, which was again divided and extension applied on the 14th. By the 1st of July he was able to walk on the sole of his foot with a common boot, treading with great ease and firmness, and was discharged "well" on the 31st.

The operation in my practice has in no instance appeared to have been painful, and has always been performed with ease. There has not, in a single case, been an alarming symptom, and only once did the patient seem to suffer after it. This was my first case, and before I had

ever seen a tendon divided. I directed the extension to be made, as advised by the French operators, soon after the operation, and the patient suffered severely for the first twenty-four hours, and passed a sleepless night. Since that time I have not extended the limb till the external wound has completely healed; in this way the suffering is avoided, nor is there apparently any loss of time, for the foot has in these cases come down quite as soon as in the one where the extension was earlier applied. In the case in which I divided the hamstring tendons, no attempt was made to extend the limb till sixteen days after the division, on account of inflammation in the sheath of the biceps, and yet the patient was able to bring the sole of the foot to the floor in six weeks after the operation.

In conclusion, I should say, from what has come under my own observation,

1st. That the operation of tenotomy, when it is proper to be done at all, may be performed with safety upon patients of almost any age, though it is likely to afford greater and more speedy relief in proportion to the youth of the patient.

2d. That it is an operation that can easily be performed by any well-educated surgeon.

3d. That it is important in doing it to make the external incision as small as possible, as in this way inflammation is less likely to occur.

4th. That extension should not be applied till the external wound has entirely healed.

And, lastly, That the patient, if the deformity has been in any degree considerable, should be required to wear, for a year at least, a boot with suitable springs, that will keep the foot in the proper position, and at the same time counteract the tendency of the muscles to contract.

LOW SPIRITS.

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J. W. Ward, Earl of Dudley, exhibited a salutary example of the solicitude attendant on what are called "eminent situations." Considering that "to whom much is given, much is required," he desired to secure a position, yet apprehended the being placed in one which might be regarded subordinate. With exalted opinion of parliamentary reputation, he despaired of acquiring it, and feared his failure would be noticed and attributed to laziness. Anxious to fulfil his friends' expectations, he dreaded disapprobation. He was for 32 years Bishop Landaff's intimate and correspondent. His letters bear marks of intellectual, moral character, strong sense; acute, candid observation; original, deep reflection, lively imagination, knowledge of books and men, rarely united; of a sincere, virtuous, honorable mind intent on being useful, on performing well his public and private duties; exhibiting in youth and more advanced age playful fancy, vigorous understanding, serious heart, intellectual energy, contempt for idle indulgent life; deep, awful religious

sense, constancy in friendship, gratitude for kindness and benefits, warm affection and esteem for real friends, considerateness to dependents and inferiors, unfailing filial duty, and respectfully recognizing the father's authority and the son's obligations.

He wrote, "May 20, 1822. I hear you complain of melancholy and depression. Lately I hardly escaped from a like visitation. Last week I had such anxiety, nervousness, irresolution, despondency, with disordered stomach, life was loathsome to me.

"June 17th. In spite of most rigid, undeviating temperance, my stomach is constantly disordered; gloom and anxiety have been rarely chased, for a moment."

After this his letters presented a new character, alternately depressed and agitated spirits, deep distress, gloom; the estimable moral qualities and religious principles shone brighter.

"June 28, 1822. I am better, still sadly low and incapable of effort; nothing I so much dread. The attack has been coming on some time. Had I been aware of its nature, I might have guarded against its approach. I am quite under dominion of tormenting feelings. In vain reason tells me my view of unpleasant circumstances is exaggerated. Regret, apprehension seize me; I dread solitude, for society I am unfit; my every error is constantly before me. I am ashamed of what I feel, when I recollect what prosperity I enjoy. I seem transplanted beyond reason or comfort. Now and then I enjoy a few hours' respite. I was naturally cheerful and gay.

"July 2d. Pray let me see you, not so much out of kindness to a friend, as compassion to an unhappy fellow creature. My situation is horrible. What is to become of me? My feeble body cannot long resist my mind's constant agitation. Sleep almost forsakes me. That alone enabled me to go through the day. I am weary, yet unable to repose.

"July 4th. I have not yet been able to form any plan. Your kindness does me good; it seems inconsistent with the existence of any foundation for my anxieties.

"July 6th. I suffer less from extreme agitation, which at intervals was almost intolerable; despondency, conviction of the immutability of my condition, gains ground on me. My distress is less acute, because habitual; I am more convinced that I have bid adieu to happiness. By sudden, copious infusion, existence has been embittered. I seem condemned to pass the rest of my days in perpetual pain. If it were consolation, as has been said, to have companions in misfortune,* I might consider that immense superiority of genius and accomplishments has not saved others from errors, humiliation, enemies' taunts, friends' disappointments, self-disapprobation, from opportunities misused and advan-

* Under depression of spirits the sufferer is often introduced into scenes called *cheerful*, to distract him from his sad musings. The result is seldom favorable. His subsequent reflection induces comparison of his situation with that which he has quitted, not in his own favor; thus his melancholy is confirmed. Let the sad one be introduced among those who are more grieved than he; his sympathy is invited, he sees that greater sorrows than his are yet not overwhelming; that he may sink yet deeper in affliction; his energy is awakened for his preservation; shame represses his murmurs, when others bear their greater ills. A man groaning under calamity, and intent upon rash retreats, has been withheld by a prospect held before him of his babyless, deserted, unsustained, distressed family.

tages thrown away. I dare not express all I feel. I am almost overwhelmed.

"July 8th. I have not experienced the last twenty-four hours such acute mental distress as tortured me for many preceding days. I dread its recurrence in all its violence, to its cessation I cannot look. Such wounds must leave scars, from time to time to open again and become as painful as ever. July 6th, I was so nervous and distressed I could hardly enter my friend's room. R., whose gloom is almost as heavy as mine, is still very agreeable. It is dishonest in the Quarterly to puff Dr. Reid's book on nervous diseases. If any branch of the public administration were as infamously jobbed as the reviews, it must fall a victim.

"July 9th. I had my carriage at the door this morning. The idea of a solitary journey sinks my spirits. I cannot endure it. It is ridiculous weakness, I can't help. Do nothing in reference to me; I am not in a fit state to ask or risk it.

"July 11th. My night was sleepless and agitated, this day deplorable. Most of what I have gone through is owing to my mind's texture. Self-reproach increases ten-fold every other suffering. Among many painful feelings that possess my whole heart, is, I may appear to have trifled with you, and put you to inconvenience. I have behaved most foolishly about my visit, and allowed my nerves and fancy to get the better of my reason and opinion. Ascribe it to sickness of body and heart, often threatening to overwhelm me. Your friendship supports me. This day has been one of my worst. The iron entered my soul deeper than before. But, comparative tranquillity has succeeded a violent paroxysm. I trust, under Providence, to time and patience for relief. While A.'s life was threatened, he found time, attention and calmness to offer consolation to me."

After a few days of gleams of hope, then gloom and nervous agitation, then calmness, then horrible paroxysms, he resolved to go from Oxford to Buxton or London, but was long undetermined which. He left for London. But he wrote next from

"Buxton, July 21. I ought to be ashamed to tell you I ended with Buxton. The journey helped to sustain me under those causes of distress which have been pressing on my mind, and under shame for the scenes I made you witness. I thank you for your pains to reconcile me to myself. I will try to be less sorry for what passed than I ought.

"July 23d. I again thank you for your delicate kindness in enduring my strange waywardness, and in endeavoring to spare me the shame and remorse its recollection would produce. May my pain atone for the weakness I displayed. I am in a state of mind which I abstain from picturing; the traits are dismal, and familiar to you.

"Aug. 12th. I have recovered sufficient self-command not to be a burden to others. But I cannot help suspecting a shade is to be over the rest of my life. To a certain period hope triumphs over experience, then experience gradually extinguishes hope. The best of life is not very good. Errors become irreparable, exertion loses much of its value

and motive. I will try not to abandon myself to inaction and despondence.

"Aug. 23d. I am tolerably well. I will use all means that reason suggests to prevent relapse. I could find it in my heart to be very low to-day; I will not give way to it.

"Sept. 8th. I cannot help reflections on time wasted, opportunities lost, errors committed."

These few weeks of suffering were succeeded by years of health and happiness.—A detailed record made by so intelligent an historian of his own sufferings, thus relieved, must solace other persons so afflicted.—He died March 6, 1833, having been entirely withdrawn from society nearly a year before on account of his altered mental condition, attributed to physical disease. A formation of his brain appeared, which seemed in solution of his last illness.

What incentive to a wise, commendable course of life is contained in man's liability to such reflections, which are likely to recur with pungent force in those seasons of depression which overtake even persons of habitual cheerfulness! What support do they derive, when in scanning their history, occasions for self-condemnation fail to present themselves! "The stream of life, down which we go, would be clear and smooth enough, were it not for the dirt and obstacles we ourselves throw into it."

SURPRISING RECOVERY FROM THE EFFECTS OF OPIUM.

[The treatment in the following case of poisoning is somewhat different from that adopted in a case recorded by Dr. Barratt, of Middletown, Ct., at page 197 of the 14th volume of this Journal; but both cases furnish evidence of what may at such times be accomplished by a steady perseverance in the use of appropriate means. We copy from the Lancet, as reported by J. B. Harrison, Esq., Surgeon, of Manchester, Eng.]

Caroline Mercy, æt. 32, was brought into the Manchester Royal Infirmary on the 16th of June, 1839, at half past 3, P. M. On admission she was in a state of complete insensibility, so that it was impossible, either by pulling the hair, or pinching the skin, to excite any wincing or signs of uneasiness; nor was any effect produced by the sudden affusion of cold water. The pupils were contracted in an extreme degree; and the countenance presented that peculiar vacancy, or want of definite expression, which is so characteristic of the influence of opium; the breathing was very considerably embarrassed; the inspirations and expirations being separated by an unusually long interval, and accompanied by slight rattles; the extremities were warm.

As soon as she was put to bed Mr. Gaskell introduced the stomach-pump, with which he injected and withdrew about a gallon of cold water; but towards the end of the operation, as the breathing became laborious, the rattle louder, and the surface assumed a more livid appearance, he thought it prudent to desist. He accordingly introduced into the stomach about two ounces of the liq. ammoniæ, contained in about as many quarts of water, afterwards removing with the pump as much as could

be conveniently withdrawn. Large sinapisms were then placed down the back, but she appeared, notwithstanding, to get gradually worse; the respiration became more difficult, the lividity greater, and the pulse less full, and slightly irregular. Boiling water was now applied to the feet and legs, which had the effect of increasing, for a time, both the power and frequency of the respirations, but the benefit was only of a very transitory kind.

At about a quarter past four, Mr. Gaskell thought it desirable to assist the respiration by artificial means, and he accordingly proceeded to adopt the following expedient: He placed a large pitch plaister on the abdomen, and by this means maintaining his hold, endeavored to solicit the usual respiratory movements. This did not, however, give him so much assistance as he had expected, and he was therefore induced to abandon it, after a short trial. He then placed a similar plaister on each side of the thorax, by which he was able to command a more decisive effect: he thus, with the assistance of the man-nurse, alternately raised and depressed the ribs, in imitation of the respiratory actions. This plan was productive of some amendment; the lividity diminished, and the natural muscular efforts were more frequent and apparent; the assistance was adapted as carefully as possible to the indications of nature. In addition to these means boiling water was occasionally applied to the arms and legs.

At about five o'clock I came to Mr. Gaskell's assistance. At this period the temperature of the body had become considerably reduced, and the conjunctiva had lost its injected character. I remember the patient's appearance was exactly that of a dying woman; and I believe it was the impression of both Mr. Gaskell and myself, that our patient could not survive long. The lips were of a livid color; the expression of the countenance altogether cadaverous, and the rattle in the throat had become exceedingly loud. Boiling water poured on the legs did not now excite the slightest movement, so that, at this time, we were almost disposed to desist from further efforts. The circumstance, however, that whilst our exertions lasted, they were evidently productive of advantage, never suffered us to abandon them for long together.

In pursuing these attempts to maintain the respiration by artificial means, we had finally laid aside the use of plaisters, having our hands placed on the margin of the chest, and our fingers curved round the cartilages of the ribs. Situated on each side of the bed, with our faces turned towards the feet of the patient, we could thus easily enlarge the capacity of the thorax by approximating the ribs, at the same time that they were elevated. In expiration the reverse movement could be accomplished with equal facility. By a steady continuance of our exertions, we had the pleasure of seeing a gradual improvement in our patient, and towards six o'clock the pulse had acquired the hard jerk which is commonly felt when the system is under the influence of opium.

Shortly after six o'clock, indications of returning sensation were evinced by occasional spasmodic quiverings of the muscles of the chest and abdomen. These spasmodic movements resembled the actions which usually denote approaching dissolution, with this essential dif-

ference, however, that they became more frequent and prolonged at each time that they were renewed.

A little after seven o'clock she raised her eyelids, and, at the same time, her left arm was slightly elevated. By persisting in artificial respiration, and using means to rouse sensibility, such as forcibly striking the face and chest with a wet towel, and applying ammonia to the nostrils, in about half an hour from this period the state of stupor had, in a great measure, disappeared. Instead of lying prostrate on her back, she now lay on her side, and was enabled to breathe without assistance. We then caused her clothes to be put on, and the vesicated parts being dressed she was taken out of bed, and compelled to walk about the room.

It is worthy of remark, that whenever, from fatigue, we were led to suspend our efforts to maintain the respiration, a degree of relapse universally followed; the lips became more intensely livid, the pulsations of the heart more feeble and irregular, and the respirations fewer, and accompanied with a louder rattle. On again resuming operations, the converse was also noticed. When the amendment became decided, and the sensibility returned, the rattle disappeared altogether; and this took place without any mucous expectoration, notwithstanding it was natural to suppose that a considerable quantity of mucus was contained in the air-passages. The subject was fortunately very favorable for our manipulations, as the abdominal coverings were sufficiently lax to admit the easy prehension of the chest. Of course the right hypochondriac region, from the situation of the liver, presented more difficulties to the operator on that side of the patient. As far as it could be done, we always waited for the natural indications of the act of inspiration, and paid great attention to regulate our movements in strict correspondence with each other. At the conclusion of our exertions, the cartilages of the ribs were slightly everted, and the cuticle removed in places by the unavoidable chafing of the hands.

June 17. It was found that she had been kept out of bed all night, which scarcely appeared necessary, and was, indeed, contrary to instructions. She had vomited through the night a light-brown colored fluid, and complained of shooting pains in the head; the pupils were less contracted; the abdomen was painful and tender to the touch. She was directed to take linseed tea, and to have a poultice applied to the abdomen. The state of the pulse was not ascertained, owing to the vesicated condition of the arms.

18. The vomiting had abated, and the pain in the head was removed, though a feeling of lightness remained. The bowels were opened by half an ounce of castor oil.

For several nights after this period she was troubled with a starting in her sleep, which, however, has been gradually removed by the administration of twenty drops of laudanum, given every night at bed-time. She also suffered much from the condition of her legs, which were severely scalded, especially on the posterior part, where they had been in contact with the hot water which had fallen on the bed; a superficial slough had formed on the dorsum of the left foot. On taking a full in-

spiration she complained of some pain at the sides of her chest, where a degree of ecchymosis was discovered; a slight eruption, also, showed itself on the back, where the mustard poultices had been applied. The legs were healed after some difficulty; and, on the 27th of August, she was discharged cured.

The moral history of the case may, in itself, possess some interest; it is briefly as follows:—Her husband, who is a master plumber, failed about four years ago, since which time he had lived irregularly; a circumstance which caused her to be much distressed and dejected in spirits. About two years ago she left her husband, and went to live with her mother, with whom she resided until the last two months; she then returned to her husband, who had promised an amendment, which, it seems, he did not keep. She again became low spirited, pawned her clothes, and was ashamed to go to her mother.

On Sunday, the 16th of June, she sat down to dinner at 1 o'clock, when, after a quarrel, she left the house and purchased sixpennyworth of laudanum, at four different shops. She says she obtained about a dessert-spoonful for a penny, and drank it as she purchased it. She then went to a neighbor's house, and can only recollect feeling heavy, and that she had brandy given to her. She is of feeble frame, and was in delicate health at the time of her admission.

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BOSTON, DECEMBER 23, 1840.

DIVISION OF TENDONS.

Readers will find an able communication from Dr. Hayward in to-day's Journal. Encouragement may be derived from it by the young surgeon who is desirous to overcome deformities and liberate limbs which have been rendered wholly useless. There is evidently an unwillingness to believe, in this vicinity, that an operation which has been so eminently successful, can be totally dispensed with, by substituting the pressure system of treatment, so favorably spoken of at Philadelphia. We should like, exceedingly, to have a fair trial made here, under the inspection of those who could not be otherwise than deeply interested in the result. Dr. Brown has spoken very decidedly upon the subject, and in the course of conversation, not long ago, represented it quite impossible to achieve as much by Dr. Chase's plan of management, as by the less tedious process of division of the contracted muscles. Dr. Hayward is the last man in the world to make an unnecessary wound, or cause a painful sensation that might have been avoided—and he has no confidence in the universal adoption of the new kind of mechanical surgery, that proposes to restore distortion of the bones of the feet without cutting the tendons. Experience is the best of all teachers.

Copying without Credit.—In the Philadelphia Medical Examiner for Nov. 28th, the six cases of operation for strabismus communicated for our

pages by Dr. Dix, are re-published, without giving credit to this Journal. It is presumed that all this happened through inadvertency, and not with an intention of doing any injustice. So many have set the law of courtesy at defiance, of late, in this respect, that we cannot refrain from expressing those feelings of regret which are actually felt on making these kind of discoveries. We have no disposition to be whining over wrongs of the character here referred to—nor do we intend to be unforgiving towards an agreeable acquaintance, even if he should transfer occasionally, unacknowledged, entire pages into his own literary messenger; still, since fair play is a jewel, why not live up to the requirements of a system which has received the sanction of all denomination of editors—giving credit for whatever is borrowed.

Surgical Examinations at Albany.—One day in each week seems to have been set apart by the Faculty of the Albany Medical College for surgical examinations, advice and operations. Cases most singular and anomalous are obviously accumulating there from a distance. This unexpected concentration of professional business, which must necessarily, we conceive, be chiefly gratuitous, calls for the organization of a hospital, commensurate with the resources and well-known philanthropy of the citizens of the capital of the powerful State of New York. The following, amongst others, was presented in the early part of December:—An individual was introduced before the class, who curiously exemplifies the efforts and the power of nature, under certain circumstances, to sustain and repair formidable injury of the vital organs. Sixteen years ago, while attempting to lift some heavy burden, to use his own language, he felt something give way within his breast. At the end of three or four months an abscess burst externally, between the ribs on the right side of the breast, and through the opening air from the lungs passed out freely, and could be expelled with sufficient force to extinguish a candle at the distance of three or four inches. For eight years this communication remained open. The lung is now evidently unfitted for the purpose of respiration, which is chiefly performed by the lung of the opposite side.

Dublin Dissector.—Messrs. Langley of New York, have sent on a specimen of their new and improved edition of the Dublin Dissector, by Robert Watts, Jr., M.D., Professor of Anatomy in the College of Physicians and Surgeons in that city. The claims of this valuable guide should not be overlooked: so essential are elementary anatomical books to the progress of students, that when they are truly good, their praises ought to be proclaimed far and wide. As Dr. Watts holds a chair at an institution which was once occupied five years by our humble self, we are disposed to look after him pretty closely, and therefore lay aside the Dublin Dissector for deliberate examination, before giving a more extended notice.

Formidable Abdominal Tumor.—A case is detailed in the American Medical Library, by John S. Rohrer, M.D., of Philadelphia, quite remarkable in its history. Suffice it to say, that after the death of the patient, a lady 57 years of age, a tumor weighing *forty-five pounds* was dissected from the abdomen, measuring nineteen inches from the front to the back surface; twenty-one inches from the apex to the base, and nine

inches through the centre—having been fifteen years in forming. A large portion of it was hard and intermixed with cartilaginous and bony matter. Dr. Rohrer gave it as his opinion that it partook of the scirrhous, lardaceous, mammary, medullary and hæmatoid forms, all combined.

Medical Convention of Kentucky.—On the 22d of Nov., 1839, the physicians of North Eastern Kentucky held a meeting at Washington, and among other resolutions adopted the following:—

"*Resolved*, That this Association respectfully urge upon the physicians of Kentucky the expediency of forming district and county societies for the promotion of medical science; and, also, that a State Convention be held in Frankfort, on the second Monday in January, 1841, for the purpose of organizing a State Medical Society."—*Western Journal of Medicine and Surgery.*

On the Employment of Lactate of Iron. By MM. Gelis and Conte.—After stating some objections to the preparations of iron in common use, the authors give their reasons for supposing that the lactate of the protoxide of iron is superior to all other ferruginous preparations. These are that lactic acid is universally distributed throughout the body; and that all authors have endeavored to administer iron in the form most easily soluble in the gastric juice. Berzelius, Tiedemann and Gmelin, Dumas, Leuret and Lassaigne, have shown that the gastric juice has sufficient lactic acid to account for its dissolving property. They find that the most useful preparations of iron are those most soluble in lactic acid and the reverse, and therefore consider it probable that iron after administration is converted into lactate of iron. Thus they were led to give the lactate direct.

M. Bouillaud and other members of the Academy administered this preparation in twenty-one cases of anemia and chlorosis; but though they speak favorably of it, it did not appear to them to possess any decided advantage over other soluble preparations of iron.—*Bul. de l'Acad.*

Complete absence of Menstruation. By M. Kruger-Hansen.—A woman of about 58 years of age, of a robust constitution, and who had always enjoyed good health, much younger in appearance than she really was, and in whom all the feminine characters were well developed, never in the whole course of her life had any discharge at all similar to the menses. She never had *fluor albus*, or any abnormal sanguineous discharges or sweats, to compensate for the want of the usual monthly secretion. It is added that the sexual appetite was present, but that she never had borne children. M. Kruger-Hansen, from this single imperfect case, draws the conclusion that the menstrual discharge is not absolutely necessary to woman. It is obvious, however, that, before such a conclusion could be drawn, it would be necessary to ascertain whether all the organs were present, and well developed. The omission of this renders the case incomplete.—*Graefe's and Walter's Journal.*

Colocynth Oil, a Substitute for Croton Oil in Neuralgia, Sciatica, &c. By M. G. Janelli.—Dr. Janelli mentions that he has found the oil of

colocynth a valuable and cheap succedaneum for croton oil, as an external application in neuralgic affections, but especially in sciatica. He relates in detail three cases of its efficacy in sciatica, and three in cases of rheumatism. After frictions with the oil, the patients generally fell asleep, so much were their sufferings alleviated, and in a few days were so far recovered as to be enabled to return to their usual avocations.—*Observatore Medico.*

Congestion of the Kidneys.—Dr. Watson reported the case of a sailor who entered the hospital for retention of urine without stricture. On passing the catheter, no urine was found in the bladder; high febrile excitement ensued, the bowels became tympanitic, and the patient died two days after admission. On autopsy, both kidneys were found enlarged, and studded in their external surface with numerous spots of coagula. Dr. W. had never met with a similar case.—*N. Y. Jour. of Med. and Surg.*

Danish Medical Statistics.—In the Danish Medical Library for January, February and March, of the present year, there are copious extracts from the Transactions of the Royal Society of Health for 1839. The first is an account of the prevailing diseases in Denmark, with the exception of Laaland and Falster, during the year 1838. These are smallpox, scarlet fever, measles, catarrhal complaints, typhus, which has been very prevalent, rheumatic fever, puerperal fever, psora, syphilis, croup and hooping cough, which last, after an absence of six years, has re-appeared among persons of all ages in the Faroe Isles. We are also informed that in the same year (1838) 18,813 persons were vaccinated in the whole kingdom for the first time, and 1052 were re-vaccinated. That in Iceland 491 were vaccinated for the first time, and 647 were re-vaccinated.

The tables of births and deaths are not very precise. The number of accidental deaths and suicides, strangely enough united together, was 514.—*Bibliothek fur Laeger.*

Medical Miscellany.—Dr. J. F. Duffie, of Philadelphia, is in the field as a successful operator for strabismus.—Dr. Joseph T. Pitney, of Auburn, N. Y., has recently tied the subclavian artery of a lady, for an aneurism, with most perfect success. The patient is said to have been restored to health.—Both smallpox and varioloid are represented to be exceedingly prevalent in the city of New York, and extending themselves into the adjacent country. Physicians must keep up an active vaccination if they wish to keep the disease under control.—James Rice, 116 years of age, is now living in Greenfield township, Gallia Co., Ohio, in fine health and spirits.

ERRATUM.—On page 301, line 25, for *soles* read *toes.*

MARRIED,—At Chicago, Ill., John W. Eldridge, M.D., to Miss S. E. Houghton, of Montpelier, Vt.

DIED,—At Yarmouth, N. S., Dr. Stephen Bond, 24, son of Dr. Stephen Bond, of York.

Number of deaths in Boston for the week ending Dec. 19, 36.—Males, 16—females, 20. Stillborn, 4.
Of consumption, 6—lung fever, 5—casualty, 2—dropsy, 2—quinsy, 1—dysentery, 1—typhoid pneumonia, 1—typhous fever, 2—old age, 3—inflammation of the brain, 1—debility, 1—dropsy in the head, 1—burn, 3—pleurisy fever, 1—hooping cough, 1—inflammation of the bowels, 1—typhoid fever, 1.

MEDICAL SCHOOL OF MAINE.

The Medical Lectures at Bowdoin College will commence on Monday, the 15th day of February, 1841, and continue three months.

Anatomy and Surgery, by	JOSEPH ROBY, M.D.
Theory and Practice of Physic, by	JOHN DELAMATER, M.D.
Obstetrics, by	EBENEZER WELLS, M.D.
Chemistry and Materia Medica, by	PARKER CLEAVELAND, M.D.

The Library contains 3000 volumes, and is annually increasing.
Amount of fees for the Lectures is $80, payable in advance.
Degrees are conferred at the close of the Lecture Term in May, and at the following Commencement of the College in September.
F. CLEAVELAND, *Secretary.*
Brunswick, October, 1840. D. 8.—6t

TREMONT-STREET MEDICAL SCHOOL.

The annual instructions of the Tremont-street Medical School, for private pupils, will commence on the first day of September, consisting of lectures and examinations in the different branches of professional study,—as follows;

A course of Lectures and Examinations on Anatomy, in September and October, by Dr. Reynolds, preparatory to the Winter Lectures at the Medical College.

A course of Lectures on the Principles and Practice of Surgery, including diseases of the Eye and Ear, by Dr. Reynolds. This course consists of one hundred lectures, and is continued nine months of the year during the whole period of pupilage. Stated examinations are made in the above branches—and private examinations, if desired, of the graduating class.

Lectures and Examinations in Physiology and Pathology, with a distinct course upon Auscultation, by Dr. Holmes, who will also deliver, if time permits, a course of Lectures on Surgical Anatomy during the winter.

A course of Lectures on Midwifery and the Diseases of Women, and weekly examinations on the same branches and on Chemistry, by Dr. Stone. The above course is illustrated by practical manipulations with the manikin. Arrangements have been made to provide the pupils with obstetric cases as often as may be necessary to familiarize them with this branch of practice.

The departments of Theory and Practice of Medicine, and Materia Medica, are under the superintendence of Dr. Bigelow—who will visit the Hospital with the pupils, for practical observation of disease, and clinical instruction. The exploration of the chest in diseases of the thoracic organs, is made the subject of particular attention in these visits.

Practical Anatomy has always been a primary object in this school, and ample provision is made for a permanent supply of subjects from November to April. The teachers will avail themselves of occasional opportunities to show the pupils interesting cases in private practice—and operations in Surgery and Ophthalmic Disease. The pupils may attend dailyon the practice of the physicians or surgeons of the Massachusetts General Hospital, and the Eye and Ear Infirmary.

Convenient rooms, light and fuel, are provided by the instructors.

JACOB BIGELOW,
EDWARD REYNOLDS,
D. HUMPHREYS STONER,
OLIVER W. HOLMES.

Boston, June 24, 1840. eplmeop6m

PRIVATE MEDICAL INSTRUCTION.

The subscribers having been long engaged in private medical instruction, propose to receive pupils, and to devote to them such time and opportunities for study and practice as are necessary for a medical education. Their pupils will be admitted without fee to the lectures on midwifery in the Massachusetts Medical College, to the practice of the Massachusetts Hospital, and have opportunities for the study of practical anatomy under the immediate superintendence of Dr. Otis. Terms may be learned by calling on Dr. Otis, No. 8 Chambers street. Fuel, lights and rooms without charge.

WALTER CHANNING,
GEORGE W. OTIS, JR.

Boston, August 13, 1840.

LEBANON SPRINGS.

The subscribers have made arrangements for the treatment of patients suffering from chronic diseases, whereby they can avail themselves of the *powerful auxiliary* afforded by the use of the Lebanon, Spring water, in the form of cold, warm, vapor and shower bath. The Lebanon water, in purity and temperature, has a strong resemblance to the famous Bristol and Buxton waters, and its remedial power is well attested.

JOSEPH BATES, *Lebanon Springs.*
August, 1840. A. 26.—12t CHILDS & LEE, *Pittsfield.*

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